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D. WEBSTER

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2002 DEC 30 A 8:58

December 20, 2002

27-19071.001

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CALDWELL

Mr. Donald Webster  
USEPA Region IV  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303-8960

RE: <sup>CMS</sup> Interim Measures Progress Report – December 2002  
Grenada Manufacturing, LLC. – Grenada, Mississippi  
EPA ID No. MSD 007 037 278

Dear Mr. Webster:

This letter serves as the Interim Measures Progress Report for December 2002 for the referenced site. The United States Environmental Protection Agency (USEPA) has requested that Grenada Manufacturing transmit such progress reports in June and December until such time that a Corrective Measures Study (CMS) Report is completed for the site. Several Interim Measures have been completed or are in progress at the site. The status of these various activities is briefly addressed below.

### RFI Report

Responses to USEPA comments dated November 26, 2001 to the *RCRA Facility Investigation (RFI) Report* were transmitted to the USEPA and Mississippi Department of Environmental Quality (MDEQ) in a letter dated May 9, 2002. These comments revolved around the Wet Well (SWMU 12) and the potential for vapor intrusion into the main manufacturing building from the groundwater plume beneath it. The comment regarding the Wet Well was addressed by a minor revision to the *RFI Report* and performance of an integrity test on the well, which was reported to the USEPA in a letter from Grenada Mfg. dated July 9, 2002. The vapor intrusion issue is being addressed separately (at the suggestion of the USEPA). At this point, we consider the RFI to be complete.

### Vapor Intrusion Assessment

A preliminary vapor intrusion assessment was submitted on February 26, 2002. Comments were received in a letter dated June 14, 2002. The comments requested that a work plan for indoor air monitoring be prepared for the site. The *Indoor Air Monitoring Work Plan* was submitted to the USEPA on July 30, 2002 and addressed items discussed in the June 14 letter from the USEPA, as well as subsequent relevant email correspondence. Comments from the USEPA were received in an email dated August 9, 2002. These comments were addressed and the Work Plan revised accordingly and then transmitted to the USEPA on September 23, 2002. Additional comments were then received from the USEPA in an email dated November 21, 2002. Those additional comments were addressed in a letter to the USEPA dated December 12, 2002. At this time, we anticipate that implementation of the

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one proposed sampling event outlined in this Work Plan will begin in February 2003. However, this schedule is dependent, in part, on agency approval of the Work Plan. As stated in the Work Plan, the need for additional air sampling will be evaluated and discussed based on the results of the initial sampling effort.

### **NAPL Recovery Efforts**

Recovery of both light non-aqueous phase liquids (LNAPL) from Area of Concern (AOC) B (former toluene UST area) and dense non-aqueous phase liquids (DNAPL) from AOC A (former TCE storage area) continues at the site. The NAPL recovery from wells located near the eastern outside wall of the manufacturing building continues on a monthly basis. In addition, MW-2 located near the sludge lagoon has been added to the NAPL recovery program. NAPL recovery has been performed by Ferguson Harbour, Inc. under contract to ArvinMeritor. These recovery efforts will continue as an Interim Measure until such time that recovery becomes impracticable and/or some other source control measure is implemented in these areas.

### **Chrome Destruct Pit (SWMU 14) Closure**

The *Closure Plan for the Chromium Destruct Pit* was initially transmitted to the USEPA by Grenada Mfg. and its consultant (Global Environmental Solutions) in March 2001. Comments on that Closure Plan were transmitted in a letter from the USEPA dated May 15, 2001. These comments were addressed and the Closure Plan revised and resubmitted in August 2001. Additional comments were received later in the same month and a revised Closure Plan transmitted in September. Grenada Mfg. received final comments in an email from the USEPA dated September 20, 2001, which were addressed in a revised Closure Plan transmitted to the USEPA on October 1, 2001. This October 1 version was subsequently approved by the USEPA.

Closure activities in accordance with the approved work plan have been completed and included the following:

- Residual chromic acid solution from the plating equipment and Chrome Destruct Pit was removed and transported to an off-site disposal facility.
- Process equipment was cleaned and removed.
- Cleaning and confirmation sampling of the Chrome Destruct Pit was completed after the process equipment was cleaned and removed.

Grenada Mfg. transmitted a letter, dated March 27, 2002, to the USEPA that presented the results of soil and groundwater sampling in the vicinity of the Chromium Destruct Pit and the Chromium Plating Lines. The USEPA issued an approval letter of clean closure for the unit dated April 4, 2002. The letter specified that no further action is required for SWMU 14. SWMU 14 was subsequently filled and capped with concrete.

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I trust that this letter provides you with the necessary information regarding the status of activities at the Grenada Manufacturing site. Please feel free to call me at (615) 250-1241 if you have any questions.

Sincerely,

BROWN AND CALDWELL



Dale R. Showers, P.E.  
Project Manager  
Design & Solid Waste



Robert E. Ash IV, P.E.  
Department Manager  
Design & Solid Waste

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**FAX TRANSMITTAL**

# of pages ► 3

To <i>Louis Crawford</i>	From <i>Don Webster</i>
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NSN 7540-01-317-7368	5099-101
GENERAL SERVICES ADMINISTRATION	

December 21, 2001

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Environmental Engineering & Consulting

Mr. Donald Webster  
USEPA Region IV  
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61 Forsyth Street, SW  
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RE: Interim Measures Progress Report – December 2001  
Grenada Manufacturing – Grenada, Mississippi

Dear Mr. Webster:

This letter serves as the Interim Measures Progress Report for December 2001 for the referenced site. The USEPA has requested that Grenada Manufacturing transmit such progress reports in June and December until such time that a Corrective Measures Study (CMS) Report is completed for the site. Several interim measures have been completed or are in progress at the site. The status of these various interim measures is briefly addressed below.

**RFI Report**

A RCRA Facility Investigation (RFI) Report was transmitted to the USEPA and MDEQ in January 2001. Comments from the agencies were received in June 2001 and a revised RFI Report addressing those comments was transmitted in October 2001. Additional comments were received in a letter dated November 26, 2001. These comments revolve around the Wet Well (SWMU 12) and the potential for vapor intrusion into the main manufacturing building from the groundwater plume beneath it. A response to the comment regarding the Wet Well will be relatively straightforward. The vapor intrusion issue is being addressed separately (at the suggestion of the USEPA) and a written assessment is due by the end of February 2002. Responses to these additional agency comments will be transmitted in January 2002 along with any necessary change pages.

**NAPL Recovery Efforts**

Recovery of LNAPL and DNAPL from wells located near the eastern outside wall of the manufacturing building at the site continues on a monthly basis. Due to the observation of NAPL in groundwater monitoring well MW-2, that well has been added to the list of wells from which NAPL is extracted and hauled off site for disposal or recycling at a licensed facility. NAPL recovery has been performed by Ferguson Harbor under contract to ArvinMeritor. These recovery efforts will continue as an interim measure until such time that recovery becomes impracticable and/or some other source control measure is implemented in these areas.

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RCRA PROGRAMS BRANCH

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### **Chrome Destruct Pit Closure**

Grenada Mfg. discontinued its plating operations in January 2001. A work plan describing the closure activities for the chromium plating lines and the Chrome Destruct Pit was transmitted to the USEPA and MDEQ in October 2001 and was subsequently approved. Closure activities in progress and/or completed include the following:

- Residual chromic acid solution from the plating equipment and destruct pit has been removed and transported to an off-site disposal facility.
- Process equipment is currently being cleaned and removed. To date, the overhead conveyors, drying oven, and plating line no. 3 have been removed.
- Cleaning and removal of the remaining two process lines is currently in progress.
- Cleaning of the destruct pit will commence after the process equipment has been cleaned and removed.

### **Groundwater Interim Measure**

A groundwater interim measure consisting of the installation of a permeable reactive barrier was identified in February 2001 for implementation at the site. A Design Basis Report describing the design components and criteria for the barrier was transmitted to the USEPA and MDEQ in April 2001. Comments from the agencies on the report were received in June 2001. Responses to those comments were transmitted to the agencies in a letter dated October 26, 2001. Additional comments were received in a letter from the USEPA dated November 26, 2001. Responses to the additional agency comments will be transmitted in January 2002 along with any necessary change pages.

The permeable reactive barrier was tentatively scheduled for installation in the summer of 2001. However, issues surrounding the potential presence of wetlands and floodplain in the location of the barrier, and the need to obtain the necessary approvals, delayed the installation. A wetlands delineation and a paper survey for threatened and endangered species will be completed in the winter/spring of 2002 and the results presented to the appropriate regulatory agencies (including the Corps of Engineers) for approval. A summer 2002 installation is now the target date.

The Design Basis Report states that the permeable reactive barrier will be approximately 1,200 feet long and 45 feet deep. Based on a bench-scale treatability study, the thickness of the wall necessary to treat the impacted groundwater to

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federal MCLs is currently estimated to vary between 0.5 feet and 4.0 feet. This represents a very large cost component. As such, additional design data is currently being collected to assess the various design criteria. Specifically, a second bench-scale treatability study will be performed early in 2002 on site groundwater and alternate concentration limits (ACLs) will be evaluated as target cleanup levels in lieu of MCLs. In addition, a limited supplemental geotechnical investigation will be performed to collect additional soil data on an apparent weak soil layer that exists in the vicinity of the barrier alignment.

Once the information described above is collected, the technical specifications for this project will be completed and transmitted to the agencies for review and approval. If necessary, the design drawings submitted as part of the Design Basis Report will be revised to reflect new information. Lastly, other related documents will also be completed and transmitted to the USEPA and MDEQ for review. These include the Construction Quality Assurance Plan (CQAP), a Performance Monitoring Plan for the barrier, and a preliminary construction schedule. These documents will be completed and transmitted to the agencies as soon as they are completed.

#### **Corrective Measures Study (CMS)**

In its letter dated November 26, 2001 the USEPA stated that a CMS Work Plan for the site is due June 30, 2002. Until such time that a final remedy is implemented in accordance with a CMS Report, these Interim Measures Progress Reports will be prepared and transmitted in June and December of each year.

I trust that this letter provides you with the necessary information regarding the status of activities at the Grenada Mfg. site. Please feel free to call me at (615) 250-1241 if you have any questions.

Sincerely,

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Dale R. Showers, P.E.  
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